

Storm Prediction Center



Map

News Organization

Search for:

• SPC NCEP All NOAA Go

Local forecast by "City, St" or "ZIP"

City, St

Go





@NWSSPC

NCEP Quarterly Newsletter

Home (Classic) **SPC Products**

All SPC Forecasts Current Watches Meso. Discussions Conv. Outlooks **Tstm. Outlooks Fire Wx Outlooks** RSS Feeds **E-Mail Alerts** Weather Information **Storm Reports Storm Reports Dev. NWS Hazards Map National RADAR Product Archive NOAA** Weather Radio

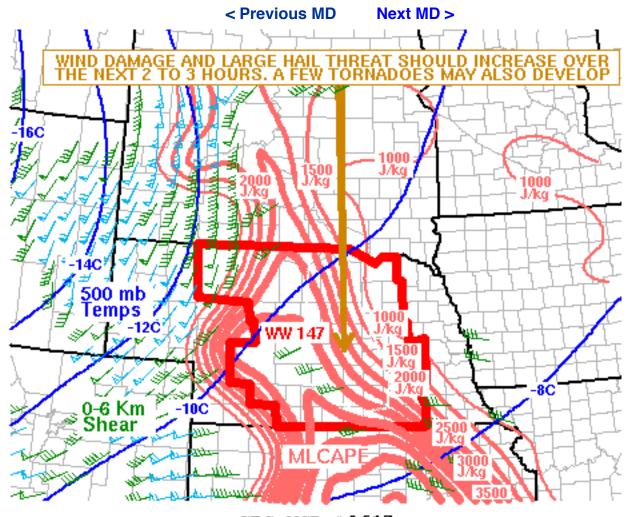
Research

Forecast Tools Svr. Tstm. Events **SPC Publications** SPC-NSSL HWT **Education & Outreach About the SPC SPC FAQ About Tornadoes** About Derechos **Video Lecture Series WCM Page** Enh. Fujita Page **Our History Public Tours**

Non-op. Products

Misc. Staff **Contact Us SPC Feedback**

Mesoscale Discussion 617



SPC MCD #0617

Mesoscale Discussion 0617 NWS Storm Prediction Center Norman OK 0708 PM CDT Fri Jun 01 2018

Areas affected... East-central Nebraska

Concerning...Tornado Watch 147...

Valid 020008Z - 020215Z

The severe weather threat for Tornado Watch 147 continues.

SUMMARY... The wind damage and large hail threat is expected to increase over the next few hours across parts of east-central Nebraska. A tornado threat may also develop.

DISCUSSION...The latest surface analysis shows a cold front moving through north-central Nebraska with a narrow corridor of maximized low-level moisture ahead of the front where dewpoints are in the upper 60s and lower 70s F. Strong to severe thunderstorms are developing along this corridor where the RAP is showing strong



instability with MLCAPE values in 3000 to 4000 J/kg range. In addition, the Hastings, NE WSR-88D VWP shows moderate deep-layer shear which appears representative of most of central Nebraska. This environment will support a threat for large hail and wind damage with the supercells early this evening. The storms will gradually move eastward but storm coverage will increase southward over the next few hours. Evidence of this southward development exists near McCook, NE where convection has recently initiated.

The instability and shear combined with steep mid-level lapse rates may also enable the stronger supercells to produce hailstones greater than 2 inches in diameter. The convection will eventually organize into a linear MCS and move southeastward along the instability gradient into parts of south-central and southeast Nebraska later this evening. A few tornadoes may also occur with the more dominant supercells as low-level shear increases.

..Broyles/Thompson.. 06/02/2018

...Please see www.spc.noaa.gov for graphic product...

ATTN...WFO...FSD...OAX...GID...LBF...

LAT...LON 42489954 41739959 41309967 40769950 40479900 40239834 40329773 40969767 41949828 42859858 43019867 43029948 42489954

Top/All Mesoscale Discussions/Forecast Products/Home

Weather Topics:

Watches, Mesoscale Discussions, Outlooks, Fire Weather, All Products, Contact Us

NOAA / National Weather Service
National Centers for Environmental Prediction
Storm Prediction Center
120 David L. Boren Blvd.
Norman, OK 73072 U.S.A.
spc.feedback@noaa.gov
Page last modified: June 02, 2018

Disclaimer
Information Quality
Help
Glossary

Privacy Policy
Freedom of Information Act (FOIA)
About Us
Career Opportunities